WHAT IS CLAIMED IS:

1. - 15. (canceled)

16. (currently amended) A method for producing a homopolyester or copolyester ~~obtainable~~ from at least one cyclic monomer, the method comprising the steps of:

polymerizing at least one cyclic monomer in the presence of an initiator, wherein the initiator is selected from the group consisting of organo-tin compounds, tin carboxylates, and tin alkoxides of the oxidation state II or IV that may contain optionally hydroxy groups;

adding at the latest at a point in time when a desired degree of polymerization is reached, a phosphinic acid and/or a phosphinic derivative of the formula (I)

$$(R_1)\,(R_2)\,P\,(=O)\,X \qquad (I)$$

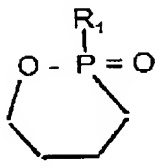
wherein R_1 and R_2 each are independently of one another hydrogen, alkyl, aryl, or hetero aryl, and X is $-OR_3$ or $-NR_1R_2$, wherein R_3 is hydrogen, alkyl, aryl, or M^I [[or ½ M^{II}]] and M^I is an alkali metal ion ~~and M^{II} is an alkaline earth metal ion~~ and wherein the substituents R_1 and R_2 have the meaning indicated above.

17. (previously presented) The method according to claim 16, wherein, in the step of polymerizing, organo-soluble metal compounds of the group IV of the transition metals are present.

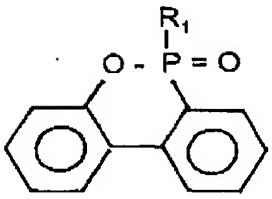
18. (previously presented) The method according to claim 17, wherein the organo-soluble metal compounds are selected from the group consisting of titanium compounds and zirconium compounds.

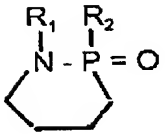
19. (previously presented) The method according to claim 16, wherein the substituents R_2 and R_3 or the substituents R_1 and R_2 of the formula (I) together with the phosphorus and optionally together with the nitrogen atom or oxygen atom form a saturated or unsaturated heterocyclic compound.

20. (previously presented) The method according to claim 19, wherein the formula (I) has the following meaning:



R_1 : H, alkyl, aryl, hetero aryl





21. (previously presented) The method according to claim 16, wherein a molar ratio of the initiator to the phosphinic acid and/or the phosphinic derivative of the formula (I) is 1:1 to 10:1.

22. (previously presented) The method according to claim 21, wherein the molar ratio is approximately 2:1.

23. (previously presented) The method according to claim 16, wherein the phosphinic acid and/or the phosphinic derivative of the formula (I) is selected from the group consisting of alky phosphinic acid, dialkyl phosphinic acid, aryl phosphinic acid, diaryl phosphinic acid, and alkyl aryl phosphinic acid.

24. (previously presented) The method according to claim 23, wherein the aryl phosphinic acid ester is 9,10-dihydro-9-oxa-10-phosphaphenanthrene-10-oxide and wherein the alkyl aryl phosphinic acid ester is 2-methyl-2-(9,10-dihydro-9-oxa-10-phosphaphenanthrene-10-oxide) succinic acid.

25. (previously presented) The method according to claim 16, wherein the at least one cyclic monomer is selected from the group consisting of cyclic esters and cyclic diesters and mixtures of the cyclic esters and the cyclic diesters.

26. (previously presented) The method according to claim 25, wherein the

cyclic esters are selected from the group consisting of ε-caprolactone, 1,3-dioxane-2-one, and 1,4-dioxane-2-one, and wherein the cyclic diesters are selected from the group consisting of 1,4-dioxane-2,5-dione, L,L-3,6-dimethyl-1,4-dioxane-2,5-dione, D,L-3,6-dimethyl-1,4-dioxane-2,5-dione, and meso-3,6-dimethyl-1,4-dioxane-2,5-dione.

27. (previously presented) The method according to claim 16, wherein the phosphinic acid and/or the phosphinic derivative of the formula (I) is added at a time when the polymerization reaction is essentially completed.

28. (previously presented) The method according to claim 16, wherein the phosphinic acid and/or the phosphinic derivative of the formula (I) is added as a pure substance, in solution or as a master batch.

29. (previously presented) The method according to claim 16, performed continuously in an extruder, wherein the phosphinic acid and/or the phosphinic derivative of the formula (I) is fed into the extruder at a short distance upstream of a discharge zone of the extruder.

30. (currently amended) A method for stabilizing a melt of a homopolyester or copolyester ~~obtainable~~ polymerized from at least one cyclic monomer, wherein the at least one cyclic monomer is polymerized in the presence of an initiator, selected from the group consisting of organo-tin compounds, tin carboxylates, and tin alkoxides of the oxidation state II or IV that may contain optionally also hydroxy groups, and optionally in the presence of organo-soluble metal compounds of the group IV of the transition metals; the method comprising the step of:

adding to a melt of a homopolyester or copolyester a phosphinic acid and/or a phosphinic derivative of the formula (I)

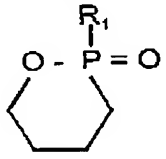
$$(R_1)\,(R_2)\,P\,(=O)\,X \qquad (I)$$

wherein R_1 and R_2 each are independently of one another hydrogen, alkyl, aryl, or hetero aryl, and X is $-OR_3$ or $-NR_1R_2$, wherein R_3 is hydrogen, alkyl, aryl, or M^I [[or ½ M^{II}]] and M^I is an alkali metal ion ~~and M^{II} is an alkaline earth metal ion~~ and the substituents R_1 and R_2 have the meaning indicated above.

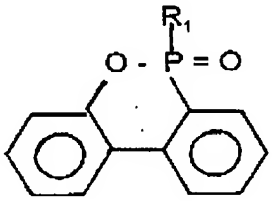
31. (previously presented) The method according to claim 30, wherein the

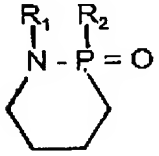
substituents R_2 and R_3 or the substituents R_1 and R_2 of the formula (I) together with the phosphorus and optionally together with the nitrogen atom or the oxygen atom form a saturated or unsaturated heterocyclic compound.

32. (previously presented) The method according to claim 32, wherein the formula (I) has the following meaning:



R_1 : H, alkyl, aryl, hetero aryl





33. (previously presented) The method according to claim 30, wherein a molar ratio of the initiator to the phosphinic acid and/or the phosphinic derivative of the formula (I) is 1:1 to 10:1.

34. (previously presented) The method according to claim 33, wherein the molar ratio is approximately 2:1.

35. (previously presented) The method according to claim 30, wherein the phosphinic acid and/or the phosphinic derivative of the formula (I) is selected from the group consisting of alky phosphinic acid, dialkyl phosphinic acids aryl phosphinic acid, diaryl phosphinic acid, and alkyl aryl phosphinic acid.

36. (previously presented) The method according to claim 35, wherein the aryl phosphinic acid ester is 9,10-dihydro-9-oxa-10-phosphaphenanthrene-10-oxide and wherein the alkyl aryl phosphinic acid ester is 2-methyl-2-(9,10-dihydro-9-oxa-10-

phosphaphenanthrene-10-oxide) succinic acid.

37. (previously presented) The method according to claim 30, wherein the at least one cyclic monomer is selected from the group consisting of cyclic esters and cyclic diesters and mixtures of the cyclic esters and the cyclic diesters.

38. (previously presented) The method according to claim 37, wherein the cyclic esters are selected from the group consisting of ε-caprolactone, 1,3-dioxane-2-one, and 1,4-dioxane-2-one, and wherein the cyclic diesters are selected from the group consisting of 1,4-dioxane-2,5-dione, L,L-3,6-dimethyl-1,4-dioxane-2,5-dione, D,L-3,6-dimethyl-1,4-dioxane-2,5-dione, and meso-3,6-dimethyl-1,4-dioxane-2,5-dione.